ACC-i2 with TCT

DIMENSIONS OF SOCIOECONOMIC STATUS AND CLINICAL OUTCOME AFTER PRIMARY PERCUTANEOUS CORONARY INTERVENTION

i2 Poster Contributions
McCormick Place South, Hall A
Saturday, March 24, 2012, 9:30 a.m.-Noon

Session Title: Outcomes of Patients Treated with PCI
Abstract Category: 4. Outcomes/Operator Volume/Public Reporting/Misc. Topics/Guidelines
Presentation Number: 2523-239

Authors: *Lars Jakobsen, Troels Niemann, Niels Thorsgaard, Leif Thuesen, Jens F. Lassen, Lisette Jensen, Per Thayssen, Jan Ravkilde, Hans-Henrik Tilsted, Frank Mehnert, Søren P. Johnsen, Department of Clinical Epidemiology, Aarhus, PE, Denmark, Department og Internal Medicine, Herning, Denmark*

Background: The association between low socioeconomic status (SES) and high mortality from coronary heart disease is well known. The exact role of SES in relation to the outcome following primary percutaneous coronaty intervention (PPCI) remains poorly understood.

Methods: We conducted a population-based follow-up study in the Central Denmark Region. We included 9070 consecutive patients from the Western Denmark Heart Registry treated with PPCI between 2002 and 2008. They were divided into high- and low-SES groups according to income, education, and employment status. The primary outcome was major adverse cardiac events (MACE: cardiac death, recurrent myocardial infarction, and target vessel revascularization) at 30 days, 1 year and 2 years. We used Cox proportional hazards regression analyses to compute crude and adjusted hazard ratios (HR) for the endpoint in each stratum of income, education and employment status.

Results: Low-SES patients were older and had more adverse baseline risk profiles than high-SES patients. Cumulative risk of MACE was higher among low-SES patients than high-SES patients when income and employment status were used as SES indicators (income: 2-year HR 1.92, 95% CI 1.71-2.17; employment status: 2-year HR 1.65, 95% CI 1.46-1.86)). After adjustment for patient characteristics, these differences were substantially attenuated (income: 2-year HR 1.18, 95% CI 1.01-1.37; employment status: 2-year HR 1.14, 95% CI 0.96-1.35). Further adjustment for admission findings, procedure-related data, and medical treatment during follow-up did not significantly affect the associations. With education as the SES indicator, no between-group differences were observed in the crude HRs of the composite endpoint.

Conclusions: Even in a universal, tax-financed, health care system, low-SES STEMI patients treated with PPCI face a worse prognosis than high-SES patients. The poor outcome appears to be primarily explained by differences in baseline patient characteristics, rather than differences in acute treatment or long-term secondary medical prophylaxis. Employment status and income, but not education level, were associated with clinical outcomes.